

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1 Claim 1. (*Currently Amended*) A method of making information contents of memory cells
2 of a volatile semiconductor memory irretrievable, said method comprising: ~~in a first step~~
3 ~~generating a digital pattern and in a second step overwriting said information contents with said~~
4 ~~digital pattern at least two times~~

5 generating a digital pattern;

6 overwriting the information contents of the memory cells with a pattern based upon the
7 digital pattern a first time at a first rate; and

8 overwriting the information contents of the memory cells with a pattern based upon the
9 digital pattern at least a second time at a second rate greater than the first rate.

1 Claim 2. (*Original*) A method according to claim 1, in which said digital pattern
2 overwrites said information contents alternately with its complementary pattern.

1 Claim 3. (*Original*) A method according to claim 1, in which said digital pattern is a
2 predefined digital pattern comprising both zeros and ones.

1 Claim 4. (*Currently Amended*) A ~~Method~~ method according to claim ~~[[1]]~~ 3, in which a
2 ratio of the number of zeros and the number of ones in said predefined digital pattern is about
3 one.

1 Claim 5. (*Original*) A method according to claim 4, in which said ratio differs less than
2 thirty percent from one.

1 Claim 6 (*Original*) A method according to claim 4, in which said ratio is one.

1 Claim 7. (*Original*) A method according to claim 1, in which said digital pattern is a
2 random pattern.

1 Claim 8. (*Currently Amended*) A device comprising a cryptographic chip and a tampering
2 signal generating device for generating a tampering signal, said cryptographic chip comprising a
3 volatile semiconductor memory having a plurality of memory cells, a control device for placing a
4 cryptographic key in memory cells of said volatile semiconductor memory, a pattern generating
5 device for generating a digital pattern, an address generating device for generating addresses of
6 said memory cells, said pattern generating device and said address generating device being
7 connectable to said volatile semiconductor memory, said tampering signal generating device
8 being connected to said pattern generating device and said address generating device, said

9 pattern generating device and said address generating device being adapted for in response to a
10 said tampering signal being connected to said volatile semiconductor memory and overwriting
11 contents of said memory cells with a pattern based upon said digital pattern for at least two
12 times, in which said cryptographic chip comprises first connecting means connecting an output
13 of said pattern generating device to a data input of said volatile semiconductor memory, second
14 connecting means for connecting said address generating device to an address input of said
15 volatile semiconductor memory and a clock generator for generating clock signals for said
16 pattern generating device and said address generating device, and comprising a digital processor
17 adapted to successively address addresses of said memory cells at a first rate, said clock
18 generating device and said address generating device being adapted when operating together to
19 successively address addresses of said memory cells at a second rate greater than said first rate.

Claim 9 (*Canceled*)

1 Claim 10. (*Original*) A device according to claim 8, in which said digital pattern is a
2 predefined digital pattern comprising both zeros and ones.

1 Claim 11. (*Original*) A device according to claim 8, in which said digital pattern
2 alternately is said digital pattern and a complementary pattern of said digital pattern.

1 Claim 12. (*Currently Amended*) A device according to claim [[9]] 8, said device being
2 adapted to have a power down state in which no main power is supplied to said device, said
3 device comprising a battery back up power supply, said pattern generating device, said clock
4 generator and said address generating device being permanently connected to said back up
5 battery power supply.

 Claim 13 (*Canceled*)

1 Claim 14. (*Currently Amended*) A device according to claim [[13]] 8, in which said
2 second rate is substantially greater than said first rate.

1 Claim 15. (*Currently Amended*) A device according to claim [[13]] 8, in which said
2 second rate is such that all addresses of said memory cells may be addressed at least three times
3 within 1 millisecond.

1 Claim 16. (*New*) A device comprising a cryptographic chip and a tampering signal
2 generating device for generating a tampering signal, said cryptographic chip comprising a
3 volatile semiconductor memory having a plurality of memory cells, a control device for placing a
4 cryptographic key in memory cells of said volatile semiconductor memory, a pattern generating
5 device for generating a digital pattern, an address generating device for generating addresses of
6 said memory cells, said pattern generating device and said address generating device being
7 connectable to said volatile semiconductor memory, said tampering signal generating device
8 being connected to said pattern generating device and said address generating device, said
9 pattern generating device and said address generating device being adapted for in response to a
10 said tampering signal being connected to said volatile semiconductor memory and overwriting
11 contents of said memory cells with a pattern based upon said digital pattern for a first time at a
12 first rate, and overwriting contents of said memory cells with pattern based on said digital pattern
13 for a second time at a second rate greater than the first rate.

1 Claim 17. (*New*) A device according to claim 16, in which said digital pattern is a
2 predefined digital pattern comprising both zeros and ones.

1 Claim 18. (*New*) A device according to claim 16, in which said digital pattern alternately
2 is said digital pattern and a complementary pattern of said digital pattern.

1 Claim 19. (*New*) A device according to claim 16, said device being adapted to have a
2 power down state in which no main power is supplied to said device, said device comprising a
3 battery back up power supply, said pattern generating device, said clock generator and said
4 address generating device being permanently connected to said back up battery power supply.

1 Claim 20. (*New*) A device according to claim 16, in which said second rate is
2 substantially greater than said first rate.

1 Claim 21. (*New*) A device according to claim 16, in which said second rate is such that
2 all addresses of said memory cells may be addressed at least three times within 1 millisecond.